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LTC 0610 Series DinionXF Color Cameras

- **15-bit DSP technology**
- **XF-Dynamic**
- **Bilinx communication**
- **NightSense**
- **Default shutter**
- **Lens wizard**
- **Auto black**
- **Video motion detection**
- **540 TVL resolution**

The LTC 0610 Series of High Performance 1/2-inch Digital CCD Color Cameras create the best possible image, even under the most difficult light and scene conditions. Based on unique 15-bit digital video processing technology and employing XF-Dynamic, these cameras provide the ultimate sensitivity with extended dynamic range. By employing the best 1/2-inch CCD available, advanced front end processing, combined with the outstanding Dinion DSP, the cameras achieve an astonishing sensitivity, providing better color images in low light situations and sharper daytime images.

Intelligent White balance algorithms, supported by a White Balance Hold function and even full manual white balance, ensure the most accurate color reproduction possible. All Dinion cameras are supplied ready to operate. Simply attach and focus the lens, and connect power to provide optimal pictures under virtually all scene conditions. No tools are required for back focus and power connection.

For extra challenging situations where fine tuning or special settings are required, the camera parameters can be individually set using the control buttons on the side of the camera and On-screen Display (OSD). Also, to aid installation, the camera automatically detects the lens type, and using the Lens Wizard ensures accurate (back) focusing for perfectly sharp pictures at all times.

Functions

XF-Dynamic

Extended dynamic range is brought to a new level on the LTC 0610 Series Camera by XF-Dynamic technology. XF-Dynamic automatically processes the highly accurate 15-bit digital signal to optimally capture the detail in both the highlight and lowlight areas of the scene simultaneously, to maximize the information visible in the picture.

Bilinx Technology

The LTC 0610 Series cameras incorporate Bilinx. Bilinx is a bidirectional communication capability embedded in the video signal of all Bosch Dinion cameras. With Bilinx technicians can check status, change camera settings and even update firmware from virtually anywhere along the video cable. Bilinx reduces service and installation time, provides for more accurate setup and adjustment, and improves overall performance. In addition, Bilinx uses the standard video cable to transmit alarm and status messages, providing superior performance without additional installation steps.

Video Motion Detection

The built-in video motion detector allows you to select up to four fully programmable areas with individual thresholds. The global scene change detector minimizes false alarms caused by sudden lighting condition changes, such as switching on or off the indoor or security lighting. When motion is detected alarms may be displayed in the video signal, the output relay can be closed in addition to alarm message transmission on Bilinx.

Auto Black

The automatic black level feature, enhances contrast by removing veiling glare from the picture or when contrast is reduced by fog or mist.

Default Shutter

When viewing moving objects a fast shutter speed is required. When using a fast shutter speed the lens opening or gain control needs to be increased to maintain the video signal. The camera sensitivity is limited by the fast shutter speed. The default shutter setting of the LTC 0610 offers the best of all worlds, fast shutter speed as long as there is sufficient light, however as the light level falls, when other adjustments have been exhausted, the shutter reverts to the standard setting maintaining the cameras excellent sensitivity.

Back Light Compensation (BLC)

Offering a fully programmable BLC area of interest, and a variable BLC level, the camera can be easily set up for even the most challenging entrance applications.

Lens Wizard

The LTC 0610 Series automatically detects the type of lens installed. The Lens Wizard will focus the lens at the maximum lens opening, to ensure that focus is maintained throughout the entire 24-hour day/night cycle. No special tools or filters are required.

Programmable Modes

The camera supports three independent operating modes. The 3 modes are preprogrammed for typical applications, but are fully programmable for individual situations. Switching between modes is easy via Bilinx or the external alarm input.

NightSense

The LTC 0610 cameras feature NightSense. With NightSense the sensitivity is increased by 9 dB in monochrome mode. NightSense can be automatically activated in low light situations, or remotely using Bilinx.

SensUp

By increasing the integration time on the CCD up to 10 times, the effective sensitivity is dramatically enhanced, especially useful where there is no artificial lighting and you rely on the moon, stars and scattered radiation.

Certifications and Approvals

Region	Certification
Europe	CE

Electro Magnetic Compatibility

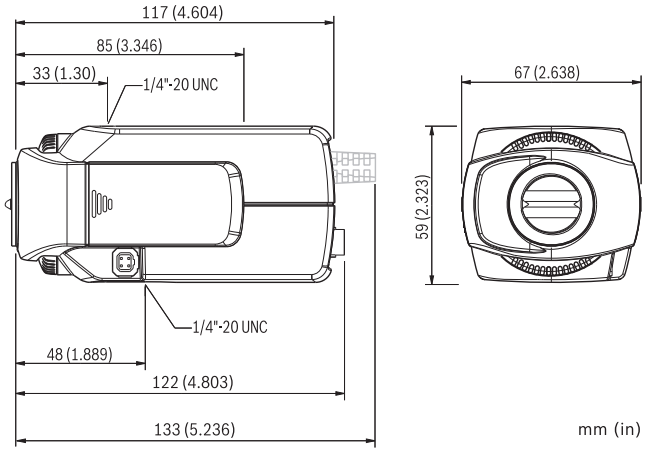
Emission	EN55022 class B, FCC class B part 15
Immunity	EN50130-4 Alarm Systems, Part 4
Vibration	Camera with 500 gr (1.1 lbs) lens according to IEC60068-2-27

Safety

LTC 0610/11 and LTC 0610/51: EN60065

LTC 0610/21 and LTC 0610/61: UL6500, cUL CAN/CSA E60065-00

Installation/Configuration Notes



Dimensions in mm (inches)

Parts Included

Quantity	Components
1	LTC 0610 Series Dinion^{XF} Color Camera
1	Spare male 4–pin lens connector
	Lens not included

Technical Specifications

Electrical

Model No.	RatedVoltage	
LTC 0610/11	12–28 VAC	45–65 Hz
	11–39 VDC	
LTC 0610/21	12–28 VAC	45–65 Hz
	11–39 VDC	

Model No.	RatedVoltage	
LTC 0610/51	85–265 VAC	45–65 Hz
LTC 0610/61	85–265 VAC	45–65 Hz

Power Consumption	4 W
Imager	Interline CCD type, ½-in. image format

Active Pixels

PAL Models	752 H x 582 V
NTSC Models	768 H x 492 V

Sensitivity (3200 k)

Sensitivity (full video)[1)]	1.4 lx (0.14 fc)
Sensitivity 50 IRE[1)]	0.35 lux / 0.14 lux (NightSense) (0.035 fc / 0.014 fc (NightSense))
Minimum Illumination[1)]	0.18 lux / 0.08 lux (NightSense) (0.018 fc / 0.008 fc (NightSense))
Minimum Illumination with SensUp	0.018 lux / 0.008 lux (NightSense) (0.0018 fc / 0.0008 fc (NightSense))
Horizontal Resolution	540 TVL
Signal-to-Noise-Ratio	> 50dB
Video Output	1Vpp, 75 Ohm
Y/C Output	Y: 1 Vpp / C: 0.3 Vpp
Synchronization	Internal, Line Lock, HV-lock and Genlock (Burst lock) selectable
Shutter	Auto (1/60 (1/50) to 1/500000), fixed, flickerless, default
Night Sense	Auto, forced, off
Sensitivity up	Off, automatic continuous up to 10x
Auto Black	On, off selectable
Dynamic Range	32x dynamic range enhancement
Dynamic Noise Reduction	Auto, off selectable
Contour	Sharpness enhancement level selectable
BLC	Off, area and level selectable
Gain	Auto (maximum level selectable to 28 dB) or fixed level selectable
Lens Mount	C and CS
White Balance	ATW (2500–10000 K), AWB hold, manual WB selectable
VMD	4 area, sensitivity selectable
Alarm Output	VMD or Bilinx
Alarm Input (TTL)	Profile switching, +5 V nominal, +40 VDC max.
Alarm Output Relay	Max. 30 VAC or +40 VDC, max. 0.5 A continuous, 10 VA
External Synchronal Input	75 Ohm or High Impedance selectable
Cable Compensation	Up to 1000 m (3000 ft) coax without external amplifiers (automatic setup in combination with coaxial communication)
Camera ID	16 character editable string, position selectable

Sensitivity (3200 k)

Lens Types	Manual, DC- and Video-iris auto-detect with override DC-iris drive: max 50mA continuous
	Video-iris: 11.5 ± 0.5 VDC, max. 50 mA continuous
Remote Control	Bi-directional coaxial communication

1) F/1.2, 89% reflection, SensUp off

Mechanical

Dimensions (H x W x L)	59 x 67 x 122 mm (2.28 x 2.6 x 4.8 in.) without lens
Weight	450 g (0.99 lbs) without lens
Tripod Mount	Bottom (isolated) and top 1/4-inch 20 UNC
Controls	OSD with softkey operation

Environmental

Operating Temperature	-20 °C to +50 °C (-4 °F to +122 °F)
Storage Temperature	-25 °C to +70 °C (-13 °F to +158 °F)
Operating Humidity	20% to 93% Relative humidity
Storage Humidity	up to 98% Relative humidity

Ordering Information

LTC 0610/11 DinionXF Color Camera 1/2-inch, high performance, 540 TVL, PAL, DSP, 12 – 28 VAC/11 – 39 VDC, 50 Hz	**LTC0610/11**
LTC 0610/21 DinionXF Color Camera 1/2-inch, high performance, 540 TVL, NTSC, DSP, 12 – 28 VAC/11 – 39 VDC, 60 Hz	**LTC0610/21**
LTC 0610/51 DinionXF Color Camera 1/2-inch, high performance, 540 TVL, PAL, DSP, 85 – 265 VAC, 50 Hz	**LTC0610/51**
LTC 0610/61 DinionXF Color Camera 1/2-inch, high performance, 540 TVL, NTSC, DSP, 85 – 265 VAC, 60 Hz	**LTC0610/61**
Accessories	
LTC 3264/30 Varifocal Lens 1/2-inch, 4.5 – 10 mm, DC-iris, CS-mount F1.6-360, 4-pin	**LTC3264/30**
LTC 3274/41 Varifocal Lens 1/2-inch, 7.5 – 75 mm, DC-iris, C-mount, F1.7-360, 4-pin	**LTC3274/41**
LTC 3283/20 Zoom Lens 1/2-inch, 8.0 – 48 mm, Video-iris, CS-mount F1.4-360, 4-pin	**LTC3283/20**
TC120PS Power Supply Unit 110-120 VAC/15 VDC, 50/60 Hz, 300 mA	**TC120PS**
TC220PS Power Supply Unit 230 VAC/12 VDC, 50 Hz, 10 VA	**TC220PS**
TC220PSX-24 Power Supply Unit 230 VAC/20 VAC, 50 Hz, 20 VA	**TC220PSX-24**
TC1334 Power Supply Unit 120 VAC/24 VAC, 60 Hz, 30 VA	**TC1334**

Ordering Information

Software Options

VP-CFGSFT Configuration Software for cameras using Bilinx, includes VP-USB Adaptor	**VP-CFGSFT**

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